GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:1703
ANSWERED ON:27.07.2016
Outdated Technology in IMD
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Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether outdated technology, old equipments and shortage of staff are causing hurdles for the India Meteorological Department (IMD) in weather prediction;

(b) if so, the details thereof and the reasons therefor;

(c) whether IMD failed to predict torrential rains and the devastating flood in Tamil Nadu and if so, the reasons therefor;

(d) whether the Government proposes to purchase latest equipments, increase staff and upgrade the technology in IMD and if so, the details thereof;

(e) the details of funds required and made available for the purpose; and

(f) the other steps taken/being taken to enhance the capability of IMD?

Answer

THE MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a) No Madam.
(b) Does not arise.
(c) No Madam. India Meteorological Department (IMD) issued warnings (as detailed in Annexure − I) 3-days in advance for occurrence of heavy (7-12 cm per day) to very heavy (13-25 cm per day) rainfall that occurred in Chennai and other parts of Tamilnadu. Regional Meteorological Centre Chennai had further issued more area specific warnings, in which areas that were likely to receive extremely heavy rainfall (> 25cm per day) were also indicated to the state level disaster management authorities.
(d)-(e)Augmentation of the observing system networks for the upgradation of IMD and recruitment of staff is a continuing process that shall be taken up as per the emerging needs from time to time.
(f) Starting from the XI five year plan, Government has initiated a comprehensive upgradation of (i) observation systems (ii) advanced data assimilation tools (iii) advanced communication and IT infrastructure (iv) high performance computing systems and (v) intensive/sophisticated training of IMD personnel to facilitate the implementation of advanced prediction models for improving the accuracy of weather forecasts.

During the XIIth plan, the High Performance Computing (HPC) systems have been up-scaled to 1.2 petaflops so far to support the ongoing efforts on modelling. Operational implementation of improved suite of prediction models has enhanced the weather forecasting capability through assimilation of all available global satellite radiance data for the production of forecast products at 22km grid globally and 9km/3km grid over India/regional/mega city domains.

Further, under the National Monsoon Mission initiative, the Indian Institute of Tropical Meteorology (IITM), Pune, Indian National Centre for Ocean Information Services (INCOIS), Hyderabad and National Centre for Medium Range Weather Forecasting (NCMRWF), NOIDA have embarked upon to build a state-of-the-art coupled ocean atmospheric model for a) improved prediction of monsoon rainfall on extended range to seasonal time scale (16 days to one season) and b) improved prediction of temperature, rainfall and extreme weather events on short to medium range time scale (up to 15 days) so that forecast skill gets quantitatively improved further for operational services of IMD. Forecasts, early warning of severe weather events and advisories are issued by IMD at national, regional and state levels. In order to provide early warning of severe weather events, IMD has setup a network of state meteorological centres to have better coordination with the state and district level agencies.